Summary
Of
Bridge Rehabilitation Study

Claude Allouez Bridge

Main Street (WIS 32)
City of De Pere

Purpose

The Claude Allouez Bridge has carried traffic over the Fox River for 70 years. The service life of the bridge has been exceeded. The bridge is in need of replacement or rehabilitation in order to continue to provide safe, reliable, and functional service to its daily users.

One of the four alternatives under evaluation in the Environmental Document is referred to as the "No Build" alternative. This alternative involves the rehabilitation, in lieu of the replacement of the existing structure.

The purpose of the current Bridge Rehabilitation Study is to review existing bridge condition and annual inspections reports and, utilizing this information, identify the repairs that will be needed to extend the service life of the structure for 20 years.

Repairs

The bridge is basically constructed of concrete and steel. Over the life of the structure, a combination of road salt and water has caused the structure to deteriorate. Deterioration has primarily involved concrete spalling and metal corrosion. Based on the problems observed in the 2001 annual safety inspection, rehabilitation should include:

- Replacement of the concrete deck and parapet walls.
- Replacement of the expansion joints.
- Replacement of the steel bascule structural units with shallow steel girders.
- Replacement of the concrete deck girders, east of the bascule, with prestressed I girders.
- Replacement of the steel railing.
- Cleaning and painting (and possibly replacement) of the bearing assembles.
- Cleaning and repainting the steel girder and truss members.
- Replacement of all steel parts that have section loss and pack rust.
- Patching the deteriorated concrete surfaces of piers and abutments.
- Patching deteriorated concrete beam seats.

The extent of the rehabilitation effort will be better identified after a more extensive engineering investigation is completed. Like the rehabilitation of an old home, the actual work effort may not be totally known until the rehabilitation process is actually underway.

Project costs and timetable

In order to complete the rehabilitation project, the bridge will need to be closed to both vehicular and pedestrian traffic. The current downtime for the rehabilitation is estimated to be between 9 and 16 months. The likely downtime will be about 11 months, however, until the final rehabilitation effort is identified, the actual downtime will not be known.

Based on typical 2002 construction costs, the rehabilitation cost for the structure is estimated to be about $4.6 million.